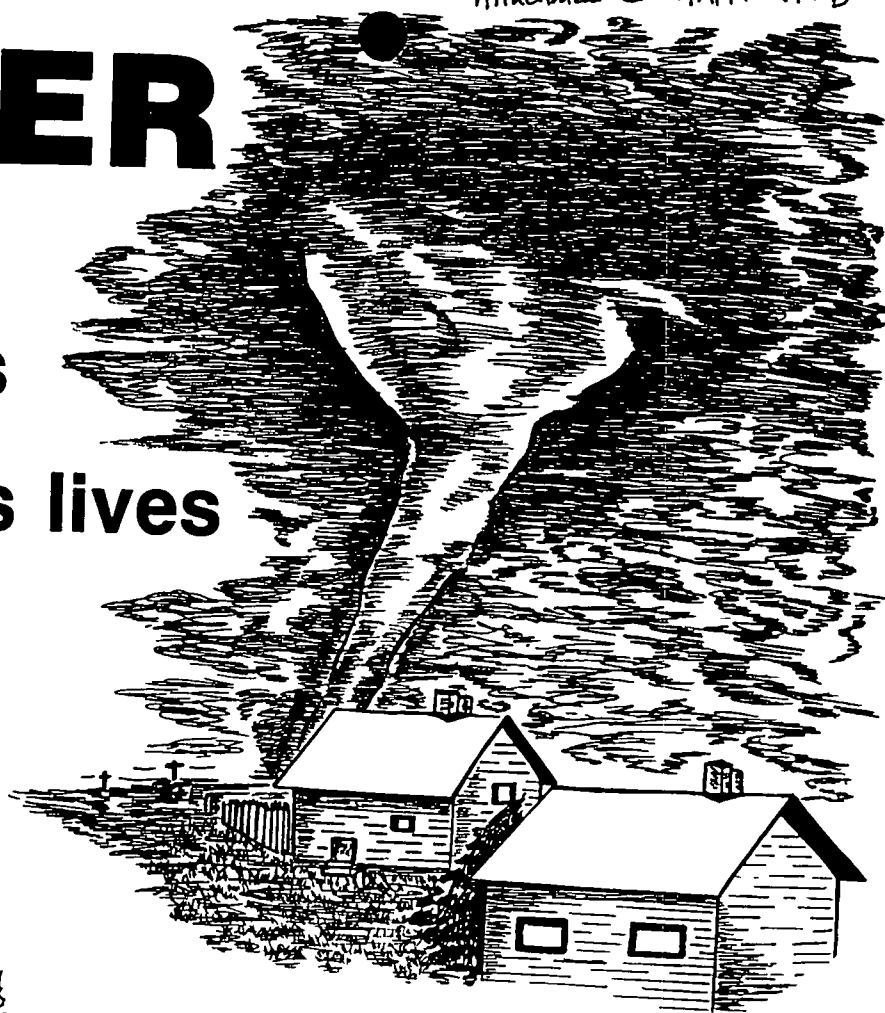


# DISASTER

A citizen's guide  
for preparedness

Knowledge saves lives



DEPARTMENT OF  
EMERGENCY MANAGEMENT

520454





To report a crime in progress, a fire or for emergency medical service,

## **CALL 9-1-1**

This simple number is all it takes to get fast, reliable help anywhere in Potter/Randall County. If you're calling from a phone booth, it's even a free call.

But no matter where you are, your location and the phone number will automatically appear on our computer screen. So should the conversation be cut off, we can still come to your aid.

That same feature makes it easy for little children to use 9-1-1. All they have to do is call. We can take it from there.

The deaf community, too, will find 9-1-1 easy to use because the new system is designed to handle TTY/TDD calls.

## **No more long delays**

Until now, every emergency medical service, police and fire department in the Potter/Randall County had its own emergency number. Worse yet, if you were in an unfamiliar part of the county, you couldn't always be sure which one had jurisdiction. The result was a lot of precious time wasted fumbling for numbers or trying to get help from the operator.

## **With 9-1-1, every call now goes to the right place**

It doesn't matter whether you're in Amarillo, Canyon, Lake Tanglewood or any other area of Potter/Randall County. Your call is automatically routed to that locale. And that's where your help comes from. Without any red tape or confusion.

As for the cost, it comes to about 20 cents a month included in your local phone bill. Less than the price of a cup of coffee or a candy bar.

So, when you see a crime take place or a fire or when someone needs emergency medical care, call 9-1-1. You'll get the fastest, most reliable help available in Potter/Randall County.

**POTTER-RANDALL COUNTY  
EMERGENCY COMMUNICATIONS  
DISTRICT**

## DEPARTMENT OF EMERGENCY MANAGEMENT

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April 1993

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## **DISASTER**

### **KNOWLEDGE SAVES LIVES**

#### **A CITIZEN'S GUIDE FOR PREPAREDNESS**

The purpose of this booklet is to help you be better prepared to protect yourself during emergencies and disasters. It will inform you how to recognize potential dangers, how to assist yourself, and how local government will provide emergency services to you. This information will also assist you in planning for your safety and that of your family.

#### **UNDERSTANDING OUR SITUATION**

The purpose of Emergency Management is to save lives and protect property. Total protection from disaster cannot be provided solely by government, nor is it a simple measure that an individual acting alone can achieve. The very word "Disaster" is frightening. To most of us, "Disaster" means terrible danger, destruction, and loss of life. You need to protect yourself. City and County Government, in cooperation with other concerned agencies, shall identify and study possible disaster threats; analyze their potential; design preventive measures; and develop recovery programs. It requires all of us, however to work together toward a common goal with confidence and unity.

You, the citizen, either privately or as a member of an organization, are the most important element in the emergency management system. While you expect to receive instructions and assistance in effecting your survival, you must search out and determine the best course for yourself, and to aid those around you.

Local government shall provide warning in an emergency and then establish direction and control of the overall response effort. In achieving this end, the function of government at all levels is to avoid or lessen the possible impact of a disaster. This is accomplished by practical emergency planning and advance preparation.

#### **UNDERSTANDING THE THREATS AND HOW TO COPE WITH THEM**

The basic procedures and personnel used for management, warning, and saving lives, are the same for all emergency or disaster situations. As capability is increased to handle natural disasters, it is also increased for other emergency events. A smooth, controlled transition will occur as daily operations are expanded to handle any emergency or disaster.

#### **EVACUATION**

Under some hazardous situations, Fire, Police or Emergency Management officials will recommend evacuation of areas affected by an emergency event. NO ONE can be forced to leave their home or property. It is the choice of that individual. However, these recommendations are made carefully, and it has proven to be safer to leave, and return later. If an evacuation order

is given, shelters will be opened for the evacuated individuals and families. If you have friends or relatives outside of the threatened area with whom you can stay, make arrangements with them. If not, obtain the location of the nearest shelter from emergency personnel or from radio or television announcements. Take clothing, special medicines, money, sleeping bags or blankets, pillows, baby needs, and books/games for small children. Take pets with you. Provisions for their care will be made at all shelters. Leave or store all perishable food; close and lock windows and doors; turn off lights and electrical appliances; turn down the heating/air conditioning system; and leave quickly. Hopefully, you will never be asked to evacuate your home but, if an emergency mandates evacuation, you can insure your safety and comfort by planning ahead and knowing the proper steps to follow.

## **IN-PLACE SHELTERING**

In some cases, officials may determine to advise people to stay indoors and take steps to reduce the flow of air into the structure as the most effective protective option. This strategy may be used by emergency officials when it is recognized that people can not be evacuated from an area prior to the arrival of a toxic cloud. If indoor sheltering is recommended all available means will be used to advise the public of proper actions to take. These include:

- a. Stay inside.
- b. Close all doors and windows.
- c. Turn off all heating and air conditioning units.
- d. Turn off all outside exhaust fans or units.
- e. Cover mouth and nose with damp cloth.
- f. Listen to radio or television for additional instructions and updated evacuation notices.

## **PUBLIC INFORMATION**

In the event of a disaster, Emergency Public Information will be provided by the media. This information should assist in your recovery efforts. Examples include: shelter locations, fresh food and water availability, sources of emergency assistance, sources of disaster funds, and general information to aid in returning conditions to normal as quickly as possible.

This booklet has been prepared and distributed by the Department of Emergency Management for Amarillo and Potter/Randall Counties. The Department offers public information and awareness programs in the form of films, and lectures. Also available, upon request, are various books, brochures, and pamphlets which provide information on all types of disasters and emergencies. The available printed materials provide information ranging from severe weather to nuclear preparedness.

The Citizens of Amarillo and Potter/Randall Counties should be prepared for the possibility that a disaster or emergency will strike this area and that it could be of a magnitude to be beyond the capability of simple recovery operations. Each individual needs the knowledge to cope with the destructive effects that a disaster could create.

### **WARNING**

A key to saving lives is the ability to provide adequate and timely warning. Individuals need to insure they have the means to receive emergency warnings, know what to do for protective measures and respond accordingly. Emergency Management Officials in Amarillo have several different means of public warning at their disposal and will activate applicable warning systems when necessary. The types of warning are described below along with the City and County areas covered. **Since the best source of emergency information is local radio and television stations, you should turn on battery powered radios or televisions when the outdoor warning sirens are activated.**

### **EMERGENCY BROADCAST SYSTEM**

KGNC AM 710/KMLT FM 98 is the primary Emergency Broadcast System (EBS) radio station, with KDJW AM 1010 as the alternate. Emergency information will be broadcast over these stations with coverage throughout Potter and Randall Counties. In addition to the EBS stations, many area radio and television stations will also broadcast emergency information.

### **OUTDOOR WARNING SIREN SYSTEM**

The City of Amarillo has 42 outdoor warning sirens located throughout the corporate city limits. Potter County maintains sirens in Bushland, Bishop Hills, Cliffside, and Rolling Hills. Randall County maintains sirens at the Canyon E-Way and McCormick Road, Tangle-Aire, Mescalero Park, Rockwell Acres North, Rockwell Acres South, Country Estates and Umbarger. When sounded, citizens should take appropriate action and remember to listen to a radio or television for emergency warning details.

### **AMARILLO ALERTING AND INFORMATION SYSTEM**

The Department of Emergency Management transmits emergency warning and/or emergency information to the public via VHF radio (155.145 MHz). Security and business offices, private homes, schools, churches, day care centers, or other locations within a 15–20 mile radius Amarillo can receive these warnings on scanners or less expensive tone activated monitors. Compatible receivers are available at area mobile radio sales and service shops. Style and price will vary but all receivers should meet the following technical specifications:

1. The Unit must receive on 155.145 MHz, and
2. The Unit must have a dual-tone sequential decoder that will respond to the following tones:

1st Tone: 643.0 Hz  
2nd Tone: 2361.0 Hz

## **CABLE TELEVISION CUT-IN**

The Department of Emergency Management can, when necessary, interrupt programming on most channels of the TCA Cable Network. This will be done to provide emergency information to viewers.

## **NOAA WEATHER RADIO (162.550 MHz)**

Receivers equipped to receive the National Weather Service or those with Weather Alert radios can be alerted by the National Weather Service of impending severe weather. Other emergency announcements will be made upon request by the Department of Emergency Management.

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**Note:** The rest of this booklet deals with specific types of events that could cause a disaster. Each event will be described and will include comments concerning the dangers, along with preparedness and response information.

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## SEVERE THUNDERSTORMS

A thunderstorm is a violent example of convection. Convection is the process in which cold upper air sinks and warm air rises. As the warm air rises, cumulonimbus clouds, called "thunderheads" develop. These clouds create the thunderstorm which develops strong winds, lightning, hail, and rain. Lightning, the discharge of electricity within the storm cloud, always accompanies a thunderstorm.

Thunderheads may be miles wide at the cloud base and reach heights of 40,000 feet or more. They can generate large amounts of rain or hail on localized areas. Violent lightning can strike the ground several miles away from its parent cloud and, more importantly, tornadoes and flash floods can be caused by thunderstorms.

At any given moment, nearly 2,000 thunderstorms are in progress over the earth's surface. Their frequency and potential for violence make them one of nature's greatest threats to life and property.

### **SIGNS AND WARNINGS**

Lightning, thunder, and cumulonimbus clouds occur together. Dark, towering, or threatening clouds are the first indication of possible thunderstorms. Distant lightning and thunder is another sign. Because light travels much faster than sound, lightning flashes can be seen long before the resulting thunder is heard. Thunderstorms may occur singly, in clusters, or in line formation. Thus, it is possible that several thunderstorms may affect a community within a short period of time.

The National Severe Storms Forecast Center in Kansas City, Missouri issues severe thunderstorm watches. A severe thunderstorm watch means that conditions are such that thunderstorms may occur in the Amarillo and/or Potter/Randall area. The Amarillo Office of the National Weather Service will then issue warnings and statements about severe weather and localized storms.

A severe thunderstorm warning is issued when a thunderstorm is producing lightning and/or damaging winds greater than 58 miles per hour, hail greater than 3/4 of an inch in diameter, and heavy rain.

### **IMMEDIATE DANGERS**

Lightning presents the greatest immediate danger during a thunderstorm. Lightning kills more people than tornadoes, floods, or hurricanes combined. In addition, property loss is estimated in the hundreds of millions of dollars annually. Flash floods and tornadoes may develop during thunderstorms. Hail can severely damage agricultural crops, structures, automobiles, etc.

### **PREPAREDNESS**

Each family should designate a safe area in their home to provide shelter during a severe thunderstorm. All family members should be instructed in what to do during a storm if they are at home, outside, or in a car.

A supply of candles and matches, and/or a flashlight and extra batteries should be kept on hand. A battery powered radio or television is also advisable in order to listen to weather and emergency warning reports.

## **RESPONSE**

During a severe storm stay completely away from any body of water that might attract lightning. It is equally wise to get away from tractors and all farm equipment.

Other potential lightning attractors to be avoided are: golf clubs, golf carts, fishing rods, bicycles, a tree or a shed standing by itself in a field or on top of a hill. Individuals should stay far away from the tallest object in an area. In a wooded area, find shelter under a low clump of trees. If there is a large tree in the area, stay twice as far away from it as the tree is tall. Avoid hilltops, and seek shelter in a low spot such as a ravine or valley or other depression.

If you are in a car, pull safely onto the shoulder of the road and turn on your emergency flashers until heavy rains subside.

A person struck by lightning will receive a severe electrical shock and may be burned, but will carry no electrical charge and can be handled safely. It is essential to initiate first aid and call emergency medical assistance immediately.

## **TORNADO**

Tornadoes are relatively short-lived local storms. They are violently rotating columns of air that descend in the familiar funnel shape from thunderstorms. The destructive path of a tornado averages approximately 250 yards in width and 15 miles in length. In extreme conditions, however, a tornado may travel over 300 miles and leave a path of total destruction over a mile wide. Tornadoes will travel between 0 and 60 miles per hour with wind speeds approaching 400 miles per hour within the tornado's center or vortex.

## **SIGNS AND WARNINGS**

Since tornadoes develop during severe thunderstorms, stay tuned to a local television or radio station for tornado reports anytime thunderstorms are active.

If you are outside, look for a funnel shaped cloud with obvious rotating motion at the base of the thunderstorm cloud. As a tornado develops, it will produce a loud roar that grows louder as the funnel cloud touches the ground. A "Tornado Watch" indicates that conditions are right for a tornado to develop and that the sky should be monitored. A "Tornado Warning" indicates a tornado has been sighted or is indicated on radar and confirmed by spotters. Warnings will provide the location of a tornado, and the immediate area affected. If a tornado is in the Amarillo and/or Potter/Randall area, all warning systems will be activated.

## IMMEDIATE DANGERS

The immediate danger from tornadoes is loss of life and severe injuries caused by debris hurled through the air by violent winds. Tornadoes also cause extensive property damage.

## PREPAREDNESS

The best preparation for a tornado is to know the safest possible locations to go to in the event of a warning. Naturally a storm cellar or basement offers the safest protection. Other good locations are:

1. In a house or apartment with no basement available, go to a first floor room, putting as many walls between you and the tornado as possible. A small windowless room or bathroom offers good protection. If you don't have a small room get under solid furniture or cover yourself with a mattress. Plan tornado drills with your family so everyone knows what to do.
2. Determine the location of designated shelters where you work or go to school. If there are none, insist that the business or school management develop a plan which provides for adequate shelter and safety.
3. If you are in an office building, shopping mall, or other public building, move to a predesignated public shelter. Stay inside the building -- don't run to your car. You are generally safer inside a substantial structure than in the open. If a predesignated shelter cannot be found immediately, move to a central area on the lowest floor possible. Stay away from windows and large open areas with wide, unsupported roofs that could collapse easily. Try to find a small room like a closet, restroom, or storeroom or get close to heavy shelving or counters. Stairwells also make good shelters if they are windowless and in the interior of the building.

## RESPONSE

When a Tornado Warning is issued, immediately take shelter. Do not stay in a trailer or mobile home, instead go to a designated shelter, or outside and lay flat in a nearby ditch, ravine or ground depression.

**Do not drive.** It is a proven fact you are safer in a home or basement shelter than in a vehicle. If you are caught driving in the city, get out of your vehicle and go into a nearby building. If you are in open country and spot a tornado, drive at a right angle to the tornado's path if you can safely do so. If not, get out of your vehicle and lie flat in the nearest depression, such as a ditch, culvert, or ravine. Be sure the depression is between you and the tornado, protect your head and stay low to the ground.

After a tornado passes, keep tuned to a local radio or television station for an "all-clear" signal before leaving your shelter. Sometimes more than one tornado will develop during a violent storm so care should be taken to remain on alert

## **HAZARDOUS MATERIALS**

Hazardous materials are chemicals or substances which are harmful to human health and the environment. These substances are used in industry, agriculture, medicine, research and consumer goods. They present a hazard when they are accidentally released into the environment (air, water, or ground).

A chemical spill is any release of a hazardous substance around a site where the chemical is manufactured, used, stored, shipped, or piped. Manufacturing plants, fertilizer plants, processors, warehouses, railroad yards, truck shipping companies and chemical disposal sites all are vulnerable to dangerous and damaging spills.

An illegal dump site is a place where a hazardous substance is intentionally and illegally disposed. Dump sites for chemical wastes must be carefully selected, prepared, and monitored to insure that human, animal or plant life is not endangered by a polluted environment. Often times these materials are dumped illegally along roadsides, in open areas, or buried underground. These illegal dump sites present a very serious problem to local residents, farmers, and consumers.

Transportation accidents involving hazardous substances occur when a vehicle carrying these materials endangers public health or the environment. Because of their increasing use, hazardous substances are constantly being transported by truck, train, airplane, or pipeline. Any major highway, railroad or pipeline is susceptible to an accident which could release dangerous substances into the environment.

### **IMMEDIATE DANGERS**

Immediate dangers from hazardous materials are fire, explosion, the release of toxic gases and the possible contamination of this area's environment and resources.

Water resources, if contaminated, can immediately be rendered unsafe and unusable. Also some chemicals can cause painful and damaging burns to the skin if you come in direct contact with them.

### **PREPAREDNESS**

It is wise to keep antidotes for known hazardous substances on hand. These should be clearly labeled. Family members should know when and how to use them.

If necessary, contact the Amarillo Poison Control Center at Northwest Texas Hospital. The telephone number is 354-1100. (Keep this number posted next to your telephone.)

Finally, as with other possible emergency events, it is strongly encouraged that several evacuation routes be planned.

## RESPONSE

If you are at the scene of a chemical accident, immediately contact 9-1-1. Report the nature and location of the accident. Move away from the accident scene and help keep others away. Do not walk into or touch any spilled material and most importantly, do not assume that gases and vapors are harmless because there is no odor. Therefore, avoid inhalation of all gases, fumes, and smoke.

If you cannot identify the hazardous material, DO NOT go near the accident victims. Wait for fire department personnel who are trained to handle these types of situations.

If you can positively identify the substance and know it is safe to go near, move accident victims to fresh air and call for emergency medical assistance. Remove and isolate contaminated clothing and shoes. If you or the victim have any chemicals on your skin or in your eyes then immediately wash skin or eyes with running water for at least 15 minutes. Emergency service personnel will have water if none is available.

Be alert to announcements from emergency service responders regarding further preventive measures as well as possible evacuation. An evacuation could be required several miles away from an accident scene.

## RADIOLOGICAL ACCIDENTS

A radiological accident is an incident which involves the release of radioactive materials into the environment. This type of accident can occur anywhere that radioactive materials are used, stored, or transported. Hospitals, colleges, research laboratories, industries, major highways, railroads or the Pantex plant could each be the site of a radiological accident. How dangerous the accident is and the area of contamination may vary greatly depending on the type and amount of radioactivity. Since radiation cannot be seen, tasted, smelled, or felt, the clean up of an accident will require specialized emergency service personnel who have been trained to handle radioactive materials safely and who have specialized equipment to detect and monitor radiation.

The predictability of a Pantex Plant incident/accident affecting the Amarillo area is uncertain. The Pantex Nuclear Weapons Plant has operated near Amarillo for 40 years. During this period, there have not been any radiological releases to the off-site environment, no nuclear accidents/incidents, or no plant accidents or incidents with any off-site consequences.

There are many safeguards in effect to prevent accidents and protect the public. All use of radioactive materials is heavily controlled by government regulations. The Pantex Plant and other facilities that use or transport radioactive materials must follow stringent building and container codes. Material storage, use, and waste management practices are also strictly monitored. In short, the Federal Government is actively working to protect the public from radiological hazards.

## IMMEDIATE DANGERS

The immediate danger from a radiological accident is exposure to high levels of radiation. The level of radiation that may be harmful depends on how much and how long the exposure.

## **PREPAREDNESS**

In the event of a radiological incident/accident, evacuation may be necessary. Each person should anticipate what will be required if evacuation is ordered. Know what to take, how to locate family members and pets, and how to secure your house and property in order to leave promptly.

## **RESPONSE**

If there is a radiological accident in the Amarillo area, remain calm and listen to local radio or television. If evacuation is recommended, do so immediately. Follow the announced routes even if they are crowded. You will be sent in a direction that will not place you in danger of radiation carried by the wind. If evacuation is not recommended you should **SEEK IMMEDIATE** shelter in the nearest house or building which can be made reasonably air tight by closing windows, doors, and external air intakes. If you are traveling by motor vehicle close windows, vents, and the outside heating or cooling ducts. Avoid any smoke clouds (if the accident involves fire, the smoke could be contaminated). Additional respiratory protection can be achieved by covering your nose and mouth with a wet cloth or by going into a bathroom and turning on the water in the shower to increase humidity.

Stay calm and remain indoors until advised to leave. Follow all instructions given over radio and television. If you are not in the affected area, do not attempt to go there.

## **WINTER STORM AND BLIZZARD**

Winter storms vary in size and strength. A storm may be large enough to affect many states or only a portion of the Texas Panhandle. There are three categories of winter storms: blizzard, heavy snowstorm, and ice storm.

## **SIGNS AND WARNINGS**

The National Weather Service issues watches and warnings for hazardous winter weather. Keep informed of current conditions by listening to weather reports on radio, TV or NOAA Weather Radio.

The following terms may be reported by the media during winter weather. They are good to know and understand:

- Winter Storm Watch      –    Severe winter weather may affect the Amarillo, Potter/Randall County Area.
- Winter Storm Warning    –    Severe winter weather conditions will affect the Amarillo, Potter/Randall County area
- Ice Storm Warning        –    Significant, possibly damaging, ice accumulation is expected.
- Heavy Snow Warning      –    Snowfall of at least 4 inches in 12 hours, or 6 inches in 24 hours is expected.

6000339

Blizzard Warning – Large amounts of falling or blowing snow and winds of at least 35 miles per hour are expected for several hours.

## **IMMEDIATE DANGERS**

Heavy snowfall and blizzards can strand motorists in their vehicles, cause major traffic accidents, and trap individuals in their homes. Ice storms can break power lines causing widespread blackouts.

Fire incidents during winter storms present potential problems because water supplies may freeze and fire fighting equipment may not be able to respond promptly and set-up at a fire scene.

## **PREPAREDNESS**

Each person should be prepared for isolation at home, particularly if the residence is in a rural area. It is highly possible that a severe winter storm could isolate you for one and possibly up to two weeks.

It is suggested that emergency heating equipment and fuel be stored or made readily available. Power failures may prevent standard furnaces from working, therefore a camp stove with fuel or a supply of wood or coal for your fireplace or wood stove could be used for emergency heat. Be prepared to keep at least one room of your house warm enough to live in for a week or two.

Also stock an emergency supply of food and water, as well as emergency cooking equipment. It is practical to have some foods that do not require cooking or other preparation.

A battery-powered radio or television and extra batteries should be kept on hand for access to weather forecasts, emergency information, and other advice broadcasted by local authorities. Flashlights, lanterns or even candles are essential for possible power outages.

Be sure that all family members know how to use emergency heating and lighting equipment safely to prevent fires or dangerous fumes. Proper ventilation is essential. Never use fuel in equipment that was not designed for that fuel. Burning charcoal will give off deadly amounts of carbon monoxide, so care should be given to vent fumes and smoke directly to the outside.

## **RESPONSE**

Don't be fooled if a winter storm seems mild as it begins. Some storms may take several hours to move into an area, and then may last for several days.

**AVOID ALL UNNECESSARY TRIPS.** If you are at home when a winter storm strikes, plan to stay there. Cold weather itself, without any physical exertion, puts an extra strain on the heart. If strenuous physical activity such as shoveling snow, pushing a car or even walking fast or far through deep snow is added to your body's overworked systems, you may be risking serious results. In any cold weather, and, especially during winter storms, be aware of this danger and avoid overexertion.

If you must be outdoors, wear several layers of loose-fitting, lightweight, protective clothing rather than a single layer of thick clothing. Mittens are warmer than gloves. Hoods should be worn to protect the head and face. Cover your mouth to protect your throat and lungs from the extremely cold air.

If you are caught away from home by a blizzard, don't be daring or foolhardy. Seek help if conditions threaten your endurance or abilities. Seek refuge, stay there and don't risk traveling which could leave you stalled, lost, or isolated. Don't risk overexertion which could result in serious injury.

Keep calm if you get into trouble. If your car breaks down while driving during a storm or if you become stalled or lost, think through the problem, decide what is the safest and best thing to do, and then do it slowly and carefully. If you are stuck on a well-traveled road, display a trouble signal such as turning on your flashing hazard lights, raising the hood of your vehicle, or hanging a bright cloth from the antenna or vehicle window. Stay in your vehicle and wait for help. Do not leave your vehicle to search for assistance unless you are absolutely certain you can find help within one hundred yards of your location. It is very easy to become disoriented and lost during a severe storm. While awaiting assistance, you can run your engine to keep warm, but remember to keep snow away from the exhaust pipe. Keep a window open slightly to provide proper ventilation and protection from carbon monoxide poisoning.

### **FLOOD AND FLASH FLOOD**

The transformation of a calm, slowly flowing river, creek or stream into a violent and destructive flood occurs hundreds of times each year. Floods can be slow rising or sudden. Floods can be seasonal, as when winter or spring rains and melting snow drain down stream beds, filling river basins with too much water too quickly. Flash floods are usually the result of extremely heavy rain or melting snow and are sudden.

### **SIGNS AND WARNINGS**

Floods and flash floods almost always occur during or after a period of heavy precipitation. A flood may be building in the area when local streams begin flowing more swiftly and at a noticeably higher level than normal. Listen to your radio or television for flood stage forecasts and warnings.

A flood warning tells the expected severity of flooding (minor, moderate, or major), as well as where and when flooding will occur. A flash flood warning is the most urgent type of flood warning issued. Immediate action must be taken to reach higher ground if this warning is issued for an area



## **IMMEDIATE DANGERS**

The immediate danger from flash floods is from the strength of the water current as it surges through an area. The current carries debris and causes drowning, other related injuries and building and property damage.

Slowly developing floods can interrupt power, disable natural gas supplies, and make roads impassable. People may be stranded or unable to reach their homes.

## **PREPAREDNESS**

It is recommended to stockpile emergency building materials such as sandbags, plywood, plastic sheeting, and lumber when notice is provided that flooding is imminent.

Keep your car fueled, because if electric power is disrupted, gas station pumps may be out of operation for several days.

Make family evacuation plans. If you are in a flash flood area, have several alternate routes to insure rapid evacuation.

Maintain emergency supplies such as a first aid kit, canned foods and other foods that require little cooking and no refrigeration. A portable radio or television, emergency cooking equipment, and flashlights should all be maintained in a designated area.

Store drinking water in jugs, bottles, and pans for use in case public or private water sources become contaminated.

## **RESPONSE**

In a flash flood, the primary thing to do is move immediately to high ground. Because of the speed in which a flash flood may occur, you have no time to save any possessions, or implement any precautionary measures. Save your life by moving to high ground without any hesitation. Do not attempt to cross a flowing stream where water is above your knees.

Do not attempt to drive over a flooded road or street as you can become stranded or trapped. If your car stalls while in flowing water, abandon it immediately. Vehicles offer little to no protection in the face of a raging flood.

During a slow rising type of flood you should:

1. Secure all outdoor items or store them inside along with valuable household possessions on upper levels.
2. Move vehicles, machinery, and all livestock to higher ground
3. Check emergency food and water supplies. Keep these necessities high and dry.

4. Listen to radio and television announcements from Department of Emergency Management officials. If you are told to evacuate, do so immediately. Use only those routes recommended because any other route could be blocked or otherwise made impassable by flooding.
5. If there is time before evacuation, turn off all utilities at the main switch point. Do not touch any electrical equipment unless it is in a dry area, or you are well insulated with rubber footwear and gloves.

## **STRUCTURAL FIRE AND EXPLOSION**

A structural fire is a fire in a house or building begun from human or technical causes. Explosion is a rapid and powerful combustion. The threat of fire and explosion exists in every building. Fire and explosion can be accidental from electrical wiring or careless use of fire; or it can be intentional, as in the case of arson or terrorism. Fires are most devastating when they occur in high-rise buildings where hundreds of people work or live. Accidental explosions can cause major damage to large grain storage bins when gases given off by high concentrations of grain dust explode.

### **SIGNS AND WARNINGS**

Fire alarms are typically installed in buildings to alert workers and the public. Other warning devices such as smoke detectors can alert families to fire in their homes. Intense heat, flames, and smoke are recognizable signs of fire in a structure. Explosions are usually accompanied by a loud bang, blast waves, and flying debris.

### **IMMEDIATE DANGER**

Heat and smoke present the most immediate danger from structural fire. The force of an explosion may cause injury or unconsciousness. In crowded public buildings, experience has shown irrational behavior may present the greatest danger.

### **PREPAREDNESS**

The installation of smoke detectors is strongly recommended. If you own a business, you may desire to install fire alarms and sprinkler systems. Automatic sprinklers and smoke detectors are preventive methods designed to discover and suppress fires before they spread.

Do not store combustible materials in closed areas or near a heat source. Electrical wiring and heating appliances should also routinely be checked for signs of wear, proper performance and maintenance.

Keep a fire extinguisher in your home and car and have these inspected regularly. Read the instructions on the extinguisher for inspection details.

It is also suggested that alternate escape routes from all levels of your home be planned and reviewed with all family members. Install metal or rope ladders as fire escapes from upper floors and hold periodic fire drills.

Teach all family members how to report a fire emergency. Remember in Potter and Randall Counties including the City of Amarillo you can dial 9-1-1 to report fire, police or medical emergencies. All family members should know what to do in various fire conditions such as heavy smoke or blocked exits, how to use a fire extinguisher, and how to treat burns and smoke inhalation.

## **RESPONSE**

If you locate a fire, immediately report it to the Fire Department by dialing 9-1-1 or 376-8218. Give clear and exact information concerning the fire's location and its severity if possible.

After calling the Fire Department you can attempt to extinguish small fires using an approved fire extinguisher and correct fire fighting methods. If it is an electrical fire, don't use water unless the electricity is turned off. If a flammable liquid is burning, smother it, don't splatter it. If the fire begins to spread or your extinguisher runs out of chemical, shut the door to the room and leave the area immediately.

Stay low in a burning building. Heat and smoke will rise. Hot air can scorch your throat and lungs and smoke may contain toxic fumes. Take short breaths and if possible, cover your face with a damp cloth and breathe through your nose. Be sure of your escape route. Don't let the fire get between you and the way out.

Check doors before opening. If the door is hot, don't open it. Open the door carefully if it is cool, keeping your head to one side to avoid any blast of hot air or fire.

If your clothing catches fire, drop to the ground and roll continuously until the fire is smothered.

If a fire alarm sounds in a building, leave immediately. Remain calm and do not run. Use fire exits or stairs and most importantly, **do not use** elevators.

## **DOMESTIC DISTURBANCES**

The possibility of riots, looting, bomb threats, or terrorism will always exist. Domestic disturbance can threaten the safety and well-being of residents in this area and damage millions of dollars in property in a very short time. Riots involving large numbers of people usually occur after a period of unrest and incidents of violence. Once rioting breaks out, it can continue for several weeks. Looting can occur with riots, or be sparked by natural or technological disasters which engage police forces with other activities. Bomb threats occur for purposes of extortion or terrorism. Isolated acts of terrorism may occur without any warning and may injure or kill many people.

## **IMMEDIATE DANGERS**

Immediate dangers include injury and loss of life from gunfire, explosion, and assault. Damage to buildings and other property from looting and fires associated with riots may also occur.

## **PREPAREDNESS**

A family plan for what to do if violence breaks out is a task for all individuals to consider.

Everyone should lock their doors and windows at night and when they are out.

Have a fire extinguisher handy. Know how to use it.

## **RESPONSE**

If your area erupts in violence, leave immediately if possible to do so. Otherwise stay indoors and take cover.

If you are in a building where there is a bomb threat, treat any unidentified package as a bomb. **DO NOT** move it and notify the Police or Sheriff's Department immediately. Evacuate the building as quickly and quietly as possible.

If looting breaks out, do not stay in the area or on the street. Leave immediately or you could be in danger.

In the event of fire, call the Fire Department for help and evacuate the building.

## **DAM DISASTERS**

Dams are subject to tremendous pressure from the water in the reservoirs behind them. Dam collapse can occur from too much rainfall or melted snow, engineering or construction failures, inadequate maintenance, or a combination of any of these factors. Regardless of the cause, when a dam collapses, huge quantities of water rush downstream with great destructive force.

## **IMMEDIATE DANGERS**

The immediate danger is the powerful torrent of rushing water which causes injuries, drowning, and property damage from collapsed buildings, and bridges.

The potential for loss of life and property damage is great because of the speed and devastating power from vast amounts of rushing water and the debris it carries.

## **PREPAREDNESS**

For this type of emergency, plan several alternate evacuation routes to higher ground. Know how to locate your family and pets, what to take, and how to leave as fast as possible.

## **RESPONSE**

If you hear a Flash Flood Warning issued for your area, **DO NOT HESITATE**. Go to higher ground immediately and do not stop until flood waters have passed and are subsiding.

If you hear the roar of a rushing torrent of water, get to the highest ground possible because you may have only seconds to reach safety.

Stay in your safe spot until the water has subsided or an "all-clear" announcement is made over local radio or television by Department of Emergency Management officials.

## **RESOURCE SHORTAGES**

Resource shortages occur when there is not enough of a vital resource to meet demand. Some resource shortages, such as the lack of manpower or strategic materials for the country's defense, affect the Federal Government. The shortages that affect people most directly are those of food, water, petroleum products, or electricity. Usually resource shortages are slow to develop. Special arrangements and increased conservation can reduce the hardship. However, when shortages become severe, rationing or curtailment of services may become necessary. Small or large scale shortages can cause extreme hardship and disruption of the economy, particularly in urban areas.

## **SIGNS AND WARNINGS**

Warnings that a vital resource shortage may be imminent are usually reported by the news media -- newspaper, radio and television. As a resource becomes scarce, prices go up and citizens are asked to conserve. Some resource shortages can be predicted several months in advance. For instance, destruction of a food producing area by a natural disaster is a sign that food will become scarce when current supplies run out. National boycotting of foreign oil suppliers would lead to a shortage of petroleum products such as heating oil or gasoline. Some shortages happen quickly. A national strike of truckers would cause an almost immediate shortage of food supplies in areas which depend on the shipment of food by truck. Sometimes advance warnings cannot be issued. An accident or a natural disaster at an electrical power plant could cause immediate loss of electricity to a large area.

## **IMMEDIATE DANGERS**

Loss of a vital resource can threaten lives and the functioning of this area. Without electricity, hospitals and life-support systems cannot operate. Without heat, people can suffer in periods of extreme cold. Without water, people can dehydrate in periods of extreme heat. Industries cannot operate without electrical power or raw materials. Without gasoline, transportation can be interrupted, making travel difficult.

## **PREPAREDNESS**

It is essential therefore to teach family members conservation methods. You should plan for special emergency conservation before a resource shortage happens.

Keep a limited supply of emergency foods, water, and medicines available at all times or at least when notice of a resource problem first occurs.

Stock wood or other fuels for an alternate heat source and keep candles, lanterns, flashlights and batteries on hand.

Learn how to sustain yourself on limited supplies of food. Knowledge of nutrition is helpful.

## **RESPONSE**

In any event be calm and put your emergency conservation plans into effect.

### **NUCLEAR ATTACK OR ACCIDENTAL NUCLEAR DETONATION**

The first step in preparing for a possible nuclear attack or accident is to understand the major hazards you would face if this situation should occur.

When a nuclear bomb or missile explodes, the main effects produced are intense light (flash), heat, blast, and radiation. The strength of these effects depends on the size and type of the weapon; how far away the explosion is, the weather conditions (sunny or rainy, windy or still), the terrain (whether the ground is flat or hilly); and the height of the explosion (high in the air or near the ground).

All nuclear explosions cause light, heat, blast, and initial nuclear radiation, which occur immediately. In addition, explosions that are on or close to the ground would create large quantities of dangerous radioactive fallout particles, most of which would fall to earth during the first 24 hours after detonation.

In a nuclear explosion, people near the center would be killed or seriously injured by the blast, heat, or initial nuclear radiation. People a few miles away would be endangered by the blast, heat, and fire. A high percentage of people in the lighter damage areas would probably survive these hazards, but they could be further endangered by radioactive fallout.

## **FALLOUT**

When a nuclear weapon explodes near the ground, great quantities of pulverized earth and other debris are sucked up into the nuclear cloud. There, radioactive gases produced by the explosion condense on and into this debris, producing radioactive fallout particles. Within a short time, these particles fall back to earth – the larger ones first, the smaller ones later. On the way down, and after they reach the ground, the radioactive particles give off invisible gamma rays – like X-rays.

Generally, the initial 24 hours fallout period is the most dangerous period to a community's residents. The heavier particles falling during this time will be highly radioactive and give off strong rays. The lighter particles falling later will have lost much of their radiation high in the atmosphere.

It is important to understand that fallout is not a mysterious, invisible, or unrecognizable substance that strikes without warning. Fallout particles range in size from those like grains of sand, which can be seen easily, to very small particles that appear as fine dust. The distribution of fallout particles after a nuclear explosion(s) would depend on wind currents, weather conditions, and other factors. No area in the United States could be sure of avoiding fallout. It is probable that some fallout particles would be deposited on most of the country.

Areas close to a nuclear explosion might receive fallout within 15-30 minutes, but it might take 5-10 hours or more for the particles to drift down on to a community 100 or 200 miles away.

### **FALLOUT CAUSES RADIATION SICKNESS**

Fallout arriving within a few hours after a nuclear explosion is highly radioactive. If it collects on the skin in large enough quantities, it can cause burns.

Gamma radiation is the most dangerous kind of fallout radiation because it can penetrate the entire body and cause cell damage to the organs, blood, and bones. Enough gamma radiation damage to the human body will cause illness or death.

People exposed to fallout radiation do not become radioactive and are not dangerous to other people. Radiation sickness is not contagious or infectious, and one person cannot "contract it" from another person.

### **PROTECTION FROM FALLOUT**

The more heavy, dense materials between you and the fallout particles, the better. Materials such as concrete, bricks, and earth will absorb much of the gamma rays. The more distance between you and the fallout particles, the less radiation you will receive.

Fallout radiation decays rapidly and as time passes, the radioactivity in fallout loses its strength. In most cases, the radiation level would decrease enough to permit people to leave a shelter within a few days for short periods of time. Even in communities that receive heavy accumulations of fallout particles, people soon might be able to leave shelter for minutes or a few hours at a time in order to perform emergency tasks.

### **EVACUATION**

If an international crisis should threaten to result in a nuclear attack, people living in the Amarillo area may be advised to relocate temporarily.

The City of Amarillo and Potter/Randall Counties have evacuation plans which could be used in any type of emergency - from nuclear attack or accident to hazardous materials incidents.

## SHELTERS

For protection from the radiation given off by fallout particles, people in affected areas would have to stay in fallout shelters from two or three days to as long as two weeks. Many people would go to public fallout shelters, while others – through choice or necessity – would take refuge in private or home fallout shelters.

A fallout shelter does not need to be a special type of building or underground bunker. It can be any space, provided the walls and roof are thick and dense enough to absorb the rays given off by the fallout particles outside. A fallout shelter should not be confused with a blast shelter. Blast protection requires a shelter strong enough to resist blast pressure, initial radiation, heat, and fire as well as radioactive fallout.

If you intend to use a home fallout shelter, you should gather together all the things you and your family would need for two weeks, even though you probably would not have to remain inside the shelter for that entire period. Additional information concerning shelters and other nuclear related subjects can be obtained from the Department of Emergency Management.



## DEPARTMENT OF EMERGENCY MANAGEMENT

### FUNCTIONS

The Department of Emergency Management (formally known as the Office of Civil Defense) is tasked with coordinating a comprehensive emergency management program for Amarillo and Potter/Randall Counties. This program is managed in accordance with Federal and State laws, County Court Orders, City Ordinances, and by coordination with other agencies and volunteer groups. Primary activities of the Department include:

1. Coordinating and planning for general emergency preparedness activities of local government.
2. Developing, maintaining, and activating all emergency warning systems.
3. Maintaining emergency management operations plans and procedures.
4. Preparing and maintaining emergency resource inventories.
5. Maintaining the operational capability of the Emergency Operations Center (located at Amarillo City Hall); and
6. Providing liaison between City/County and State Emergency Management organizations, and maintaining liaison and monitoring the increased readiness actions among City services when disaster threatens to occur.

### GOALS

To conduct a program of comprehensive Emergency Management within the City and Counties. Comprehensive Emergency Management includes the mitigation of, preparedness for, response to, and recovery from any man made or natural disaster.

To identify hazards which might threaten life and property within the City and Counties and provide a continuous program requiring or recommending the implementation of measures which might reduce the likelihood and impact of a disaster or emergency.

Maintain rapport with local emergency groups.

Conduct an ongoing public awareness program on hazard preparedness and protective actions.